

What is claimed is:

1. An array of biological reagents immobilized on a solid support, said array having separate known sites, said reagents at each said site interacting directly or indirectly with one or more ligands, and said reagents being covalently cross-linked to said ligands.
2. The array of claim 1, wherein said array has between 100 and 100,000 sites
3. The array of claim 1, wherein said ligands are antibodies.
4. The array of claim 1, wherein said ligands are recombinant proteins.
5. The array of claim 1, wherein said ligands are purified proteins.
6. The array of claim 1, wherein said ligands are nucleic acids.
7. The array of claim 1, wherein said ligands are oligo nucleotides.
8. A method of making an array of biological reagents, comprising the steps of  
     immobilizing a plurality of ligands on a solid support, each said ligand at a separate known site;  
     contacting said ligands on said solid support with a plurality of said reagents to allow the binding between said ligands and said reagents;  
     covalently cross-linking said ligands and said reagents.
9. The method of claim 8, wherein said ligands are antibodies.
10. The method of claim 8, wherein said ligands are recombinant proteins.
11. A method of making an array of biological reagents, comprising the steps of  
     immobilizing a plurality of ligands on a first solid support, each said ligand at a separate known site;  
     contacting said ligands on said solid support with a plurality of said reagents to allow the binding between said ligands and said reagents;

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transferring and immobilizing said reagents bound to said ligands onto a second solid support.

12. The method of claim 11, wherein said ligands are covalently immobilized on said first solid support.

13. The method of claim 11, wherein said reagents are non-covalently immobilized on said second solid support.

14. The method of claim 11, wherein said ligands are antibodies.

15. The method of claim 11, wherein said ligands are recombinant proteins.

16. A method of making an array of biological reagents on a solid support, comprising the steps of

preparing said reagents by using ligands that bind said reagents;  
immobilizing said reagents on said solid support.

17. The method of claim 16, wherein said ligands are antibodies.

18. The method of claim 16, wherein said ligands are recombinant proteins.

19. The method of claim 16, wherein said ligands are immobilized on membranes made of materials selected from the group consisting of nitrocellulose, nylon, polyvinylidene difluoride, glass, or plastics, and their derivatives..

20. A method of biological assays, comprising the steps of:

immobilizing a plurality of ligands on a solid support, each said ligand at a separate know site;

incubating said ligands on said solid support with a plurality of reagents to allow the binding between said ligands and said reagents;

covalently cross-linking said ligands and said reagents.

21. The method of claim 20, wherein one side of said support is at least 1 millimeter long.

22. The method of claim 20, wherein said ligands are antibodies.
23. The method of claim 20, wherein the number of said ligands ranges from 1 to 1,000,000.
24. The method of claim 20, wherein the number of said ligands ranges from 100 to 10,000.
25. A kit useful for detecting proteins, the kit containing a solid support, on which a plurality of reagents are immobilized, each at a predetermined position, said reagents at each said position interacting with one or a plurality of ligands.
26. The kit of claim 25, wherein said reagents are proteins.
27. The kit of claim 25, wherein said ligands are antibodies.
28. The kit of claim 25, wherein said ligands are recombinant proteins.
29. The kit of claim 25, wherein said reagents are covalently cross-linked with said ligands.